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THE DEVELOPMENT AND TRANSFORMATION OF THE FINANCIAL SYSTEM IN THE PEOPLE'S REPUBLIC OF CHINA

Damian Tobin
and Ulrich Volz

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Damian Tobin is a lecturer in Chinese Business and Management at the School of Finance and Management, SOAS University of London. Ulrich Volz is head of the Department of Economics and a senior lecturer (associate professor) in economics at SOAS University in London.

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Please contact the authors for information about this paper.

Email: uv1@soas.ac.uk

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Asian Development Bank Institute
Kasumigaseki Building, 8th Floor
3-2-5 Kasumigaseki, Chiyoda-ku
Tokyo 100-6008, Japan

Tel: +81-3-3593-5500
Fax: +81-3-3593-5571
URL: www.adbi.org
E-mail: info@adbi.org

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Abstract

This paper looks at the development and transformation of the People's Republic of China (PRC)'s financial system since the start of economic and financial reforms in 1978. It describes how despite the rapid development of capital markets since the 1990s, the PRC's financial system continues to be dominated by bank lending. Reforms have not eliminated the credit expansion impetus of large commercial banks, while the effectiveness of capital-based constraints and administrative measures is far below potential. Large state-owned banks have become important players in bond and equity markets, as well as important sources of liquidity provision for smaller commercial banks and a range of non-bank financial institutions through a combination of inter-bank funding activities, wealth management products and shadow banking/grey capital market activities. The importance of non-bank financial institutions has also continued to grow. Off-shore markets have increased the overseas holdings of financial assets, but their potential remains limited by capital controls and the fragility of the domestic financial system. An unintended consequence of this is that although the PRC's state run financial system has become more complex and more interconnected domestically, foreign participation remains low.

Keywords: China, financial markets, financial institutions, economic transformation

JEL Classification: G1, G2, O16, P34

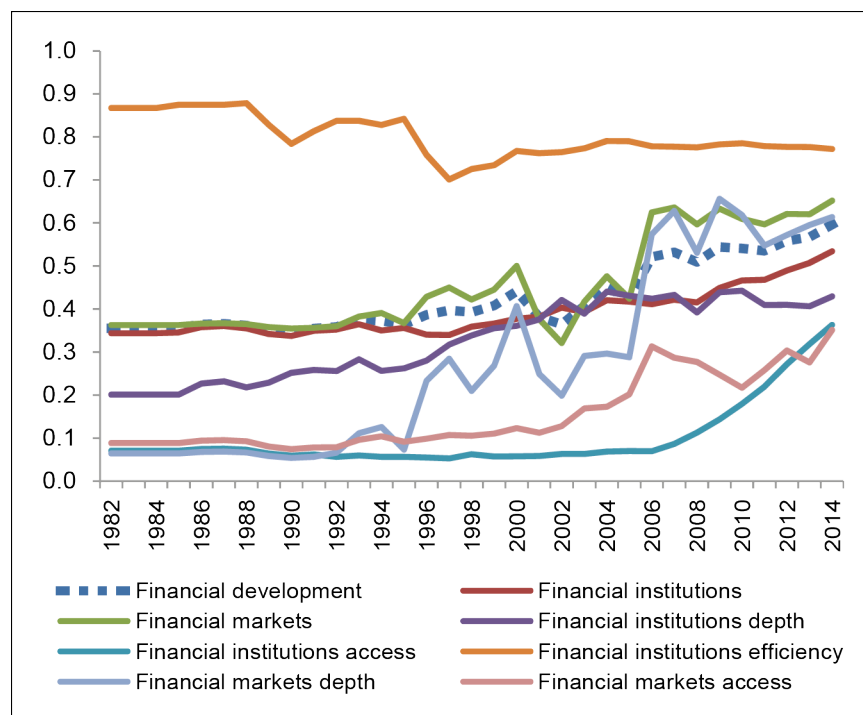
Contents

1.	INTRODUCTION	1
2.	FINANCIAL GOVERNANCE FRAMEWORK	4
3.	EVOLUTION OF THE BANKING SECTOR	5
3.1	Non-performing Loans, Stock Market Listings and Deferred Structural Reforms	9
3.2	The Emergence and Growth of Shadow Banking	11
3.3	Interest Rate Reforms, Deposit Insurance and the Moral Hazard Problem ..	13
3.4	Consolidation and Policy-driven Diversity	14
4.	STOCK MARKETS AND FINANCIAL CENTERS	16
4.1	A Politicized Regulatory Framework.....	18
4.2	From “One-third Privatization” to the “Split Share Reform”	19
4.3	Hong Kong, China’s <i>Role</i>	20
5.	BOND MARKETS.....	21
6.	FINTECH.....	23
7.	EXCHANGE RATE MANAGEMENT AND FINANCIAL OPENING	25
8.	CONCLUSIONS	27
	REFERENCES	29

1. INTRODUCTION

After close to two decades of financial sector reform, the People's Republic of China (PRC)'s financial system is now a participant in the global financial system in a way that other large Asian economies such as Japan and India have never been. Its banks and insurance companies rank among the world's largest. Yet despite remarkable growth, the PRC's policy makers continue to grapple with questions over how to best to make the financial system serve the real economy.

Figure 1: New IMF Measures of Financial Development for the People's Republic of China, 1982–2014



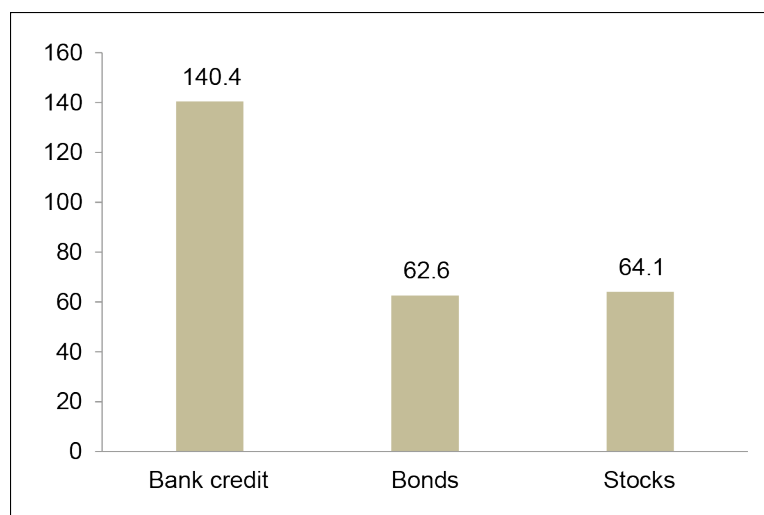
Source: Compiled by authors with data from Svirydzienka (2016).

According to a new composite index of financial development constructed by the IMF, the PRC has witnessed significant development since the early 1980s (Figure 1). However, efficiency especially in large state-owned banks has declined, the level of non-performing loans is rising and bank profit margins have deteriorated, all of which affect financial stability, which remains a significant challenge. A further challenge is enhancing financial inclusion, which continues to be a key policy priority as expressed in the PRC's 13th Five Year Plan for the period 2016–2020. As pointed out by Justin Lin, "[t]here is a mismatch between the PRC's real economy and the financial system. The country's real economy is largely comprised of farmers, small and medium-sized businesses, and yet the financial sector is dominated by big banks that prefer to deal with big companies" (quoted from Tsai, 2015: 1). While small and medium enterprises (SMEs) account for more than 97% of registered industrial firms, employ almost 65% of the workforce and generate 60% of the PRC's GDP, state-owned commercial banks extend over 75% of loans to larger state-owned enterprises (SOEs) (Tsai, 2015). Access to credit continues to be a major constraint facing SMEs. According to a 2012 survey in 15 provinces, 57.5% of SMEs had obtained funding through informal credit

markets (Li and Hu, 2013). Recent estimates put the size of the PRC's shadow banking system at 138% of GDP for May 2017 (Shih, 2017).¹ Many rural counties lack access to adequate banking services, and private enterprises face punitively high interest rates. Accordingly, the lack of access to finance is a key issue, which also undermines financial stability due to the rise of the shadow banking system.

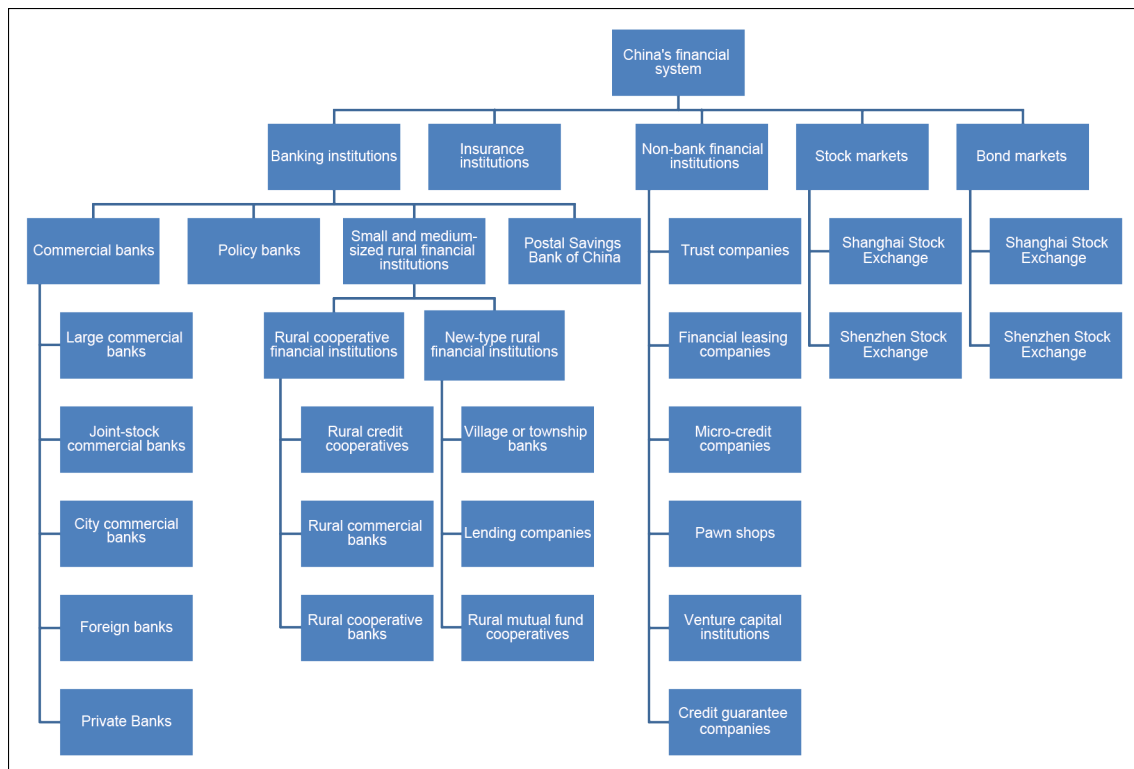
Despite the rapid development of capital markets since the 1990s, the PRC's financial system continues to be dominated by bank lending (Figures 2 and 3). Reforms have not eliminated the credit expansion impetus of large commercial banks, while the effectiveness of capital-based constraints and administrative measures is far below potential. However, the importance of non-bank financial institutions has continued to grow, and the system is characterized by an increasing interconnectedness between various components. Banks have not only become important players in bond and equity markets, they are also closely linked with the rapid growth of off-balance sheet finance. Importantly, through a combination of inter-bank funding activities, wealth management products and shadow banking/grey capital market activities, large-state owned banks have become important sources of liquidity provision to both smaller commercial banks and a range of non-bank financial institutions. An unintended consequence of this is that the PRC's state run financial system has become more complex and more interconnected. This has amplified the case for a more diverse financial system, better capable of limiting potential contagion from counterparty risk.

Figure 2: Total Finance as % of GDP, 2015



Source: Compiled by authors with data from the World Bank Financial Development Index Database.

¹ Sheng and Soon (2016) put the size of the PRC's shadow banking system at 51% of GDP at the end of 2014.

Figure 3: Overview of the People's Republic of China's Financial System

Source: Compiled by authors, building on Ping (2015).

The PRC leadership has shown a willingness to tolerate this insofar as it serves the PRC's immediate development needs. However, the maintenance of large balance sheets, which tends to make counterparties believe that being "too big to fail" implies financial stability, represents a welfare loss for society. These costs have been reflected in the direction of reforms, which since 2006 have focused on making the banking sector serve the real economy by increasing the level of financial diversity and reducing the asset share of large state-owned banks. These include:

- The extension of a pilot scheme in 2006 effectively removing geographical restrictions on the operations of foreign banks in rural areas as part of the policy of *Constructing a New Socialist Countryside (jianshe shehuizhuyi xin nongcun)*.
- Since 2007, China Post and Savings Bank engages in commercial lending.
- Removal of the interest rate lending floor in 2013, an effective subsidy to state-owned banks.
- The abolition of the deposit interest rate ceiling and a relaxation of loan to deposit ratio restrictions in 2015.
- Proposals to extend mixed ownership to banks as a way of introducing non-state capital into the financial system and improving ownership diversity.
- Pilot schemes to increase the overseas holdings of domestic equities and bonds

The remainder of this chapter is structured as follows: Section 2 provides a brief overview of the PRC's financial governance framework. This is followed by outlines of the development of the PRC's banking sector, equities markets, and bond markets in

Sections 3, 4 and 5, respectively. Section 6 provides a brief overview of the rapidly developing fintech market, which is followed by a short outline of exchange rate management and the opening of the PRC's financial sector in Section 7. Section 8 concludes and briefly touches on current developments and challenges.

2. FINANCIAL GOVERNANCE FRAMEWORK

The People's Bank of China (PBC) was created in 1948 under the leadership of the Ministry of Finance (MoF). With the "Socialist Transformation" of the PRC economy along the model of the Soviet Union's centrally planned economy in 1951, the PRC introduced a mono-bank financial system. The PBC became essentially the country's sole financial institution (besides credit cooperatives operating at the township level) and fulfilled at the same time the roles of a central bank and commercial bank.² Given the lack of commercial banks or financial markets, there was effectively no financial regulation (Huang, 2010).

Following the start of economic and financial reforms in 1978, the mono-bank system was dismantled and new banks were established. In 1979, the PBC was separated from the MoF and granted the authority of a central bank. Over time, it developed into the regulator and supervisor for the entire financial system, including banking, securities and insurance. As these sectors developed rapidly over time, the PRC adopted a sectors-based regulatory model in the early 1990s, with dedicated regulators for banking, securities and insurance (Huang, 2010). In 1992, the State Council Securities Commission (SCSC) and the China Securities Regulatory Commission (CSRC) were tasked with supervising and regulating the issuance and trading of securities on the stock exchanges. The SCSC was subsequently integrated into the CSRC, which in 1998 became the singular authority to regulate the securities market. The same year, the China Insurance Regulatory Commission (CIRC) was established to exercise oversight over the insurance sector.

In 1998, the Central Financial Work Commission (CFWC) was created in response to the Asian Financial Crisis. Although the crisis did not directly affect the PRC, which at the time still maintained tight capital controls, the Communist Party of China (CCP) realized the danger of financial crisis and hence sought to exert greater control over the financial sector (Heilmann, 2005). The CFWC was created to this end, with direct and exclusive reporting responsibility to the CCP's Central Committee (Pistor, 2012). The CFWC was abolished in 2002 and in 2003 the newly established China Banking Regulatory Commission (CBRC) assumed responsibilities for banking regulation from the PBC and the CFWC.

With a central bank charged with monetary and exchange rate policies and three specialized supervisory agencies – collectively referred to as *Yihang Sanhui* ("one bank, three commissions") – the PRC thus adopted a formal governance regime for its financial sector that resembled the regulatory structure found in many developed Western market economies at the time (Huang, 2010; Pistor, 2012). The PBC and the three regulatory authorities are subordinate to the State Council. In practice, the PBC retained an important role in banking supervision and maintained a powerful voice in strategic discussions over the direction of financial reforms (Pistor, 2012).

² Over time, a number of banks were established but later abandoned or integrated into the PBC, including the Agricultural Cooperative Bank (established in 1951) and the Agricultural Bank of China (ABC) (established in 1955).

Strategic decisions on financial sector reforms have been taken by the Leading Group for Financial and Economic Affairs, a body under the CCP Central Committee that was established by the CCP Politburo Standing Committee in 1980. It is led by either the CCP General Secretary or the Premier of the State Council and generally considered the most powerful entity in matters of economic and financial governance. Decisions on the strategic direction of financial market reforms have been also set by the National Financial Work Conference, which has convened twice a decade since the inaugural conference in 1997. Its participants have included high-ranking government officials, central bankers and regulators from the national and provincial level, as well as representatives from the headquarters and provincial branches of all major banks, insurance firms and nonbank-financial firms (Lardy, 1998).

Following the fifth National Financial Work Conference in July 2017, President Xi announced the creation of a cabinet-level committee to coordinate financial oversight to overcome the fragmentation of financial regulation (Bloomberg, 2017). He also announced a bigger role for the PBC in managing financial market risks. The new Financial Stability and Development Committee, which is headed by the Vice Premier, was established under the State Council in November 2017. The committee's office will be based at the PBC. Its remit is to supervise the PRC's monetary policy and financial regulation. It will have the authority to supervise and interrogate financial regulators and local governments (SCMP, 2017a). A further change to the regulatory structure was proposed in March 2018 at the National People's Congress, including a merger of the CBRC and the CIRC, and transfer of greater responsibilities for drafting key regulations and prudential oversight to the PBC.

An important element of financial governance in the PRC has been the control of state ownership of publicly owned financial institutions. The MoF and Central Hui Jin Investment Ltd. (Hui Jin) have been the two most important state entities with large ownership stakes in the financial sector (Pistor, 2012). Hui Jin was established in 2003 with a mandate to "to exercise the rights and the obligations as an investor in major state-owned financial enterprises, on behalf of the State" (Hui Jin, 2018).³ Hui Jin has been authorized by the State Council to make "equity investments in major state-owned financial enterprises" and "exercise the rights and perform the obligations as an investor on behalf of the State in accordance with applicable laws, to achieve the goal of preserving and enhancing the value of state-owned financial assets" (Hui Jin, 2018).

Pistor (2012) highlights that formal governance structures for the financial sector have been effectively superseded by informal governance structures which are controlled by the CCP. In particular, she points to the role of the CCP Central Organization Department, which not only appoints senior executives of the PRC's four regulatory authorities (PBC, CBRC, CSRC, CIRC) but also of all major financial institutions.

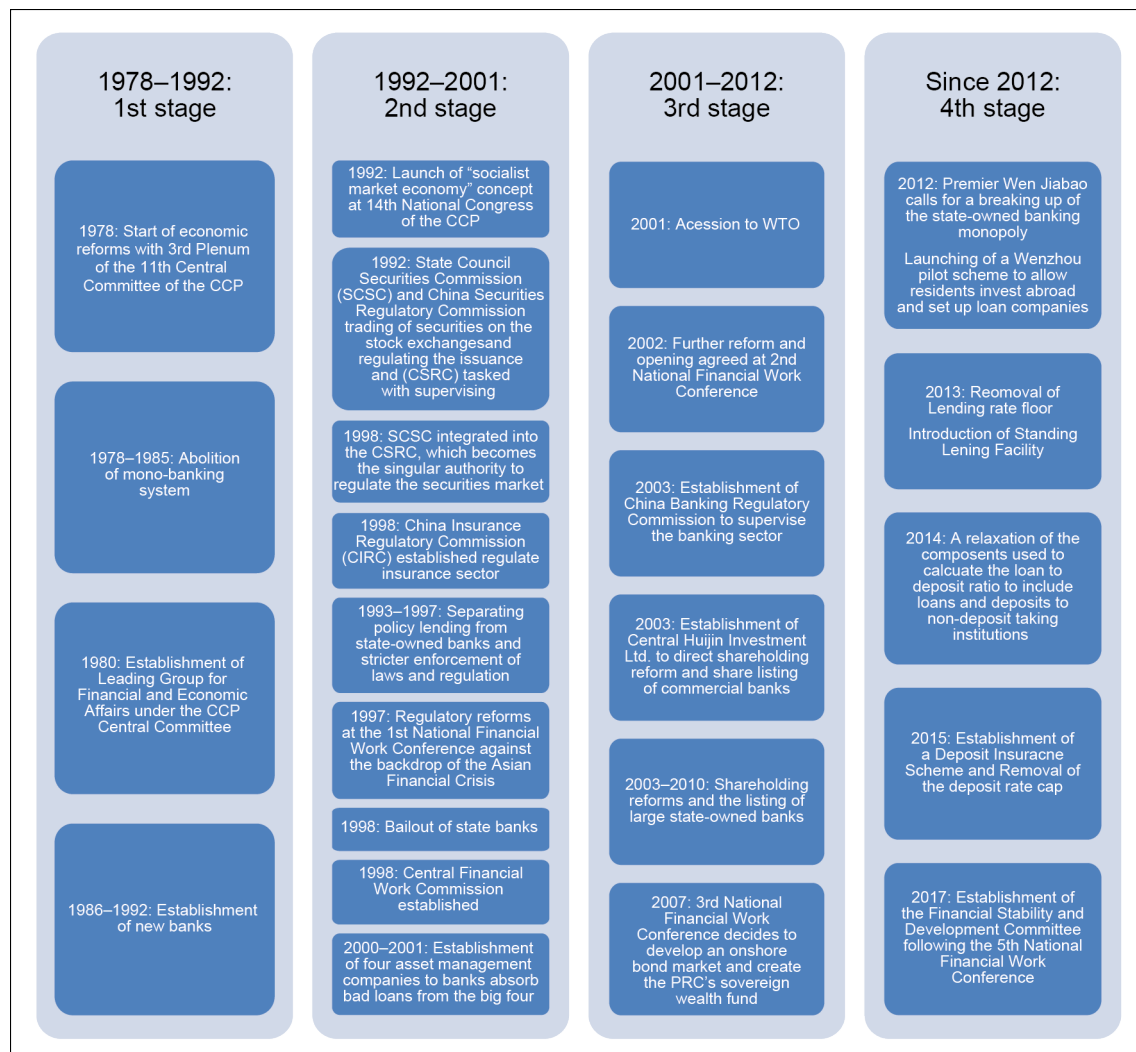
3. EVOLUTION OF THE BANKING SECTOR

The start of reform of the PRC's mono-banking system coincided with major upheavals in international finance. These included the collapse of the Bretton Woods system in 1973, an increase in competition from non-bank financial institutions and the

³ Hui Jin was initially a subsidiary of the State Administration for Foreign Exchange (SAFE), the administrative agency of the PBC responsible for foreign exchange management. In 2007, the MoF acquired all shares in Hui Jin from the PBC, which was compensated with specially issued treasury bonds. The MoF then injected the shares in Hui Jin into China Investment Corporation (CIC), the PRC's new sovereign wealth fund which was created the same year. Hui Jin has been a wholly owned subsidiary of CIC since. Hui Jin's shareholder rights are exercised by the State Council.

emergence of global money center banks. The backdrop of these events meant that as early as the 1980s, the PRC leadership had developed an intricate understanding of the relationship between large banks and financial stability. That said, official and independent scholarly accounts give relatively scant attention to the early role of banks in the PRC's economic take-off (Goodstadt, 2012). Many studies have focused on the role of informal finance in sustaining the growth of the non-state sector (Allen, Qian and Qian, 2005). Lardy (2002: 128–29) argued that the adjustment of the PRC's financial system was not inhibited by tariff rates or other protections; rather by the ability of money losing state-owned firms to continue to avoid their losses. Against this background, this section examines why after almost two decades of reorganization and institutional reform of the financial system – which arguably did not really begin until the early 2000s following the non-performing loans (NPL) crisis –, the PRC's state-banks rank among the largest in the world, while at the same time the ability of loss making SOEs to sustain their position appears unchecked.

Figure 4: Stages of Reforms in the Banking Sector



PRC = People's Republic of China.

Source: Compiled by the authors, drawing partly on Okazaki (2017: 305).

Figure 4 provides a summary of major reforms in the PRC's financial system since 1978. These have to a large extent attempted to mirror developments in international banking. Large state banks have structured themselves along these lines of modern corporations, launched initial public offerings (IPOs), appointed non-executive directors, and sold minority shareholding to foreign banks (Sun and Tobin, 2005). Significantly this approach was not new to the PRC, and its origins can be traced to the period 1911–1935 where semi-private and private banks were formed with limited liability and shareholders (Cheng, 2003). These banks mirrored their international counterparts in that they not only enjoyed limited liability, but also had long-serving high profile chief executives known as the *Jiangzhe Caifa*. These financial magnates enjoyed strong relationships with both Shanghai's capitalists and the government. The period also saw the emergence of grassroots financial institutions, the *qianzhuang* and *diandang*, which share similarities with contemporary informal lending institutions (He et al., 2017).

This train of development was interrupted by civil war and the subsequent foundation of the PRC in 1949. In 1950, a decree effectively signaled the communist takeover of the government shares in the semi-private banks and was followed by the establishment of a CCP appointed board of directors and supervisory board (Cheng, 1954). The Agricultural Bank of China was reformed in 1963 (having been abolished in 1957) with the objective of coordinating the finances of collectives and the rural credit cooperatives at the local level.⁴ The PRC maintained a link with the international financial system via the overseas branches of the Bank of China which had the objective of maximizing foreign exchange earnings to fund socialist construction (Tobin, 2016). In 1979, following the launch of the “open door” policies, the PRC established or re-opened three state-owned commercial banks (SOCBs): the Agricultural Bank of China, the Bank of China and the Construction Bank of China. In 1984 a fourth SOCB, the Industrial and Commercial Bank of China, was established. By the mid-1990s these large specialized SOCBs – often referred to as the “big four” – accounted for over 60% of the PRC's banking assets.

The first joint stock banks were formed in the early 1980s, when banks such as South Sea Bank (a private bank prior to 1949) and the Bank of Communications were launched.⁵ This was followed in 1994, by the establishment of three specialized “policy” banks, the Agricultural Development Bank of China, the China Development Bank, and the Export-Import Bank of China. Whereas joint stock banks were characterized by smaller state shareholding and faced a greater risk of bankruptcy, the specific objective of the three policy banks was to reduce the commercial banks' role in financing development projects (Lin and Zhang, 2009). Accountability to shareholders and depositors provided joint stock banks with a greater incentive than SOCBs to engage in prudent lending (Jia, 2009). They also enjoyed significant policy support in growing their loan books, especially after 2013 when the large SOCBs began to reduce their loan growth. Their growth also highlighted a funding constraint as smaller joint stock and city commercial banks do not enjoy the nationwide deposit raising networks of the larger SOCBs. As a result they became increasingly reliant on inter-bank funding (BIS, 2016). Another notable feature has been the reorganization and restructuring of the China Post and Savings Bank. This has allowed it to engage in commercial lending since 2007, a move that saw it become the country's fifth largest banking organization

⁴ A full account of financial restructuring during this period can be found in Donnithorne (1967).

⁵ Previously these banks were nearly all subsumed within the PBC though they remained as institutions – e.g., South Sea, Po Sang, Young Brothers and Yieh Yieh all retained overseas branches in Hong Kong, China, but they were for all intents and purposes part of the PRC mono banking system.

(Tobin, 2012). Its rural branch network has to some extent compensated for the decline of rural credit cooperatives and branch consolidation of the large SOCBs.

A distinguishing feature of the PRC's banking reforms is the low presence of foreign banks. This contrasts sharply with the experience of other transitional economies such as Hungary and Poland where foreign banking assets accounted for more than half of total banking assets after a decade of reform (Bonin et al., 2010: 856). After the relaxation of geographical restrictions on their operations after 2006, the market share of foreign banks grew to 2.1% in 2008 (Table 1). From 2007, foreign banks were allowed transform their mainland branches into locally incorporated banks. By 2015, some 37 solely funded foreign banks with 306 branches and subsidiaries were locally incorporated. As part of this they were required to allocate RMB 100 million (around US\$ 16 million) in freely convertible currencies transferred from the parent bank. Capital injections were also treated as foreign direct investments, effectively increasing the complexity of the approval process. Consequently, the presence of foreign banks remains low at just 1.3% of assets in 2015. To reverse this decline, the requirement to allocate a certain amount of freely convertible currency was relaxed in 2015 (Xinhua, 2014).

Table 1: Market Share (by Assets) of Major Banking Institutions (2003–2015)

	2003	2005	2008	2010	2013	2015
SOCBs	57.9	56.1	51.6	49.2	43.3	39.2
Joint stock banks	10.7	11.9	14.0	15.6	17.8	18.5
City commercial banks	5.3	5.4	6.5	8.2	10.0	11.4
Rural commercial banks				2.9	5.6	7.6
Rural credit coops	9.6	8.4	8.3	6.7	5.7	4.3
Foreign banks	1.5	1.9	2.1	1.8	1.7	1.3
Postal savings bank	3.2	3.7	3.5	3.7	4.1	4.2

Source: CSRC Annual Report 2015.

While foreign banks have had a relatively low domestic presence, PRC banks have been increasing their international activities, becoming an increasingly important source of international credit. By the end of 2015, their cross-border assets accounted for some US\$ 722 billion, making them the tenth largest creditor in the international banking system and a significant supplier of US dollar credit (BIS, 2016: 7). However, unlike other larger international creditors like the UK, Japan and Germany, the PRC is a net debtor in the international financial system. This is partly to do with the unique role of Hong Kong, China; where PRC banks have listed subsidiaries on the Hong Kong Stock Exchange and operate the market in renminbi deposit accounts and bonds (Tobin, 2016). Consequently, the cross-border liabilities of Mainland banks amounted to US\$ 944 billion at the end of 2015, a significant proportion (US\$ 320 billion) of which related to the market value of the banks' traded equity in Hong Kong, China (BIS, 2016).

3.1 Non-performing Loans, Stock Market Listings and Deferred Structural Reforms

The PRC's revival of commercial banking has not been trouble free. A combination of poor lending practices and a lack of experience in managing risk left the banks in a poor financial position. The well-known consequence of this was a rapid growth in the level of NPLs. Official estimates put the NPL ratio at 33% in 2000 while an S&P (2004) estimate which included impaired loans and off-balance sheet loan guarantees put the ratio closer to 50%. The PRC responded by launching a bank bailout amounting to 3.1% of GDP in 1998. It also established four state-owned asset management companies (AMCs) to absorb almost RMB 1.4 trillion in bad loans.⁶ In February 2004, the Law on Bank Regulation and Supervision was amended to give greater power to the CBRC as a prudential regulator of banking standards. This was followed by the international listing of three of the four large SOCBs between 2005 and 2006. The fourth bank, the Agricultural Bank of China, was listed in 2010. By the end of 2017, 39 banks were listed on the stock markets, usually in Shanghai and Hong Kong, China (Table 2). This approach, which involved integrating international best-practices where appropriate and equity investments from international banks and institutions has been described as an incremental transactional model in the sense that it did not seek to immediately replicate international banking models (Pistor, 2009).

Table 2: People's Republic of China Listed Banks

	Year Established	Year of IPO	Total Assets (30 September 2017, *30 June 2017)	Capital Adequacy Ratio (%) (30 September 2017, *30 June 2017)	NPL Ratio (%) (30 June 2017)	Number of Employees (2016)	Number of Outlets (2016)
5 large commercial banks							
Industrial and Commercial Bank of China (ICBC)	1984	2006	25,764,798	14.67	1.57	461,749	17,200
China Construction Bank (CCB)	1954/1979	2005	22,053,943	14.67	1.51	362,482	14,985
Agricultural Bank of China (ABC)	1951/1955/ 1979	2010	20,923,117	13.40	2.19	496,698	23,692
Bank of China (BOC)	1912/1979	2006	19,422,438	13.87	1.38	310,042	11,556
Bank of Communications (BOCOM)	1908/1987	2005	8,935,790	13.87	1.51	92,556	3,350
Postal savings bank							
Postal Savings Bank of China (PSBC)	2007	2016	8,764,955	12.73	0.82	169,735	40,000
9 national joint-stock commercial banks							
China Industrial Bank (CIB)	1988	2007	6,406,993	11.99	1.60	54,208	2,003
China Merchants Bank (CMB)	1987	2002	6,169,239	15.01	1.71	70,461	1,819
Shanghai Pudong Development Bank (SPDB)	1993	1993	6,063,837	11.82	2.09	52,832	1,843
China Minsheng Bank Corporation (CMBC)	1996	2009	5,712,525	11.84	1.69	56,168	3,003
China CITIC Bank (CITIC)	1987	2007	5,536,973	11.75	1.65	58,023	1,465
China Everbright Bank (CEB)	1992	2010	4,030,414	12.67	1.58	42,250	1,122
Ping An Bank (PAB)	1987	1991	3,137,481	11.28	1.76	36,885	1,072
Huaxia Bank (HXB)	1992	2003	2,445,789	12.45	1.68	39,093	886
China Zheshang Bank (CZB)	2004	2016	1,488,969	12.38*	1.39	11,305	171

continued on next page

⁶ One AMC was created for each of the big four commercial state-owned banks: China Great Wall Asset Management for the Agricultural Bank of China, China Orient Asset Management for the Bank of China, China Huarong Asset Management for the Industrial and Commercial Bank of China, and China Cinda Asset Management for the China Construction Bank.

Table 2 *continued*

	Year Established	Year of IPO	Total Assets (30 September 2017, *30 June 2017)	Capital Adequacy Ratio (%) (30 September 2017, *30 June 2017)	NPL Ratio (%) (30 June 2017)	Number of Employees (2016)	Number of Outlets (2016)
16 city commercial banks							
Bank of Beijing (BOB)	1996	2007	2,275,226	11.44	1.18	14,534	503
Bank of Shanghai (BSH)	1996	2016	1,759,999	13.27	1.16	10,149	315
Bank of Jiangsu (BJS)	2007	2016	1,737,566	10.95	1.43	14,409	541
Bank of Nanjing (BNJ)	1996	2007	1,144,671	12.88	0.86	8,348	162
Shengjing Bank (SJB)	1997	2014	938,711*	12.10*	1.53	4,925	190
Bank of Ningbo (BNB)	1997	2007	953,064	12.14	0.91	15,000	312
Huishang Bank (HSB)	1997	2013	812,678*	12.42*	1.07	9,089	406
Bank of Hangzhou (BHZ)	1996	2016	797,772	12.71	1.61	6,176	191
Bank of Tianjin (BTJ)	1996	2016	659,885*	11.64*	1.46	6,441	337
Bank of Jinzhou (BJZ)	1997	2015	644,012*	10.97*	1.06	4,482	n.a.
Harbin Bank (HRB)	1997	2014	546,927*	12.02*	1.65	7,931	355
Zhongyuan Bank (ZBY)	1948	2017	458,010*	11.82*	1.85	12,956	439
Bank of Guiyang (BGY)	1997	2016	432,932	11.65	1.46	5,716	289
Bank of Zhengzhou (BZZ)	1996	2015	431,801	12.08*	1.38	3,773	n.a.
Bank of Chongqing (BCQ)	1996	2013	408,766	12.81	1.25	4,023	136
Bank of Qingdao (BQD)	1996	2015	281,976*	13.67*	1.69	3,326	13
8 rural commercial banks							
Chongqing Rural Commercial Bank (CQRCB)	1951	2010	875,377	13.15	0.97	16,245	n.a.
Guangzhou Rural Commercial Bank (GZRCB)	1998	2017	615,752	12.11	1.73	7,099	624
Jilin Jiutai Rural Commercial Bank (JTRCB)	2008	2017	187,841	12.24	1.59	5,941	395
Changshu Rural Commercial Bank (CSRCB)	2001	2016	142,409	11.88	1.29	5,025	142
Wuxi Rural Commercial Bank (WXRCB)	2005	2016	130,179	12.26	1.31	1,352	73
Jiangyin Rural Commercial Bank (JYRCB)	1953	2016	107,307	13.11	2.45	1,419	36
Rural Commercial Bank of Zhangjiagang (ZJGRCB)	2001	2017	95,664	13.40	1.97	1,897	
Wujiang Rural Commercial Bank (WJRCB)	2004	2016	87,433	13.45*	1.71	1,427	75

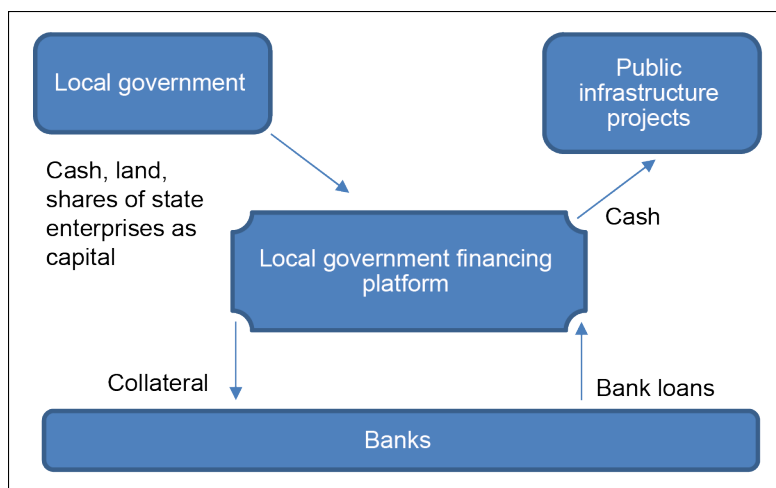
Sources: Compiled by authors with data from KPMG (2017), PWC (2017a), Bloomberg and banks' financial statements.

The drawback of this approach was that it left intact the Leninist type control structures. While these were conducive to centralized regulation, and ensured that there were limited personal connections or crossing of career paths between bank and industrial CEOs, they ultimately failed to improve the allocation of capital (Heilman, 2005; Lin, 2016). A lack of structural reforms in the financial sector also contributed to the build-up of macroeconomic imbalances (Ito and Volz, 2013).

The costs of deferring structural reforms became especially apparent following the 2008–2009 fiscal stimulus. This was not strictly a “fiscal” stimulus, since most of it consisted of bank loans and local government investment rather than central government expenditure. State-owned banks were instructed to lend to fund the bulk of the state’s stimulus package. Bank managers had little autonomy to resist government lending priorities, and they knew that based on experience, they would be rescued (Goodstadt, 2012). Much of this lending went to local government “financing platforms”. These were technically prohibited as they involved, albeit indirectly, local government borrowing (Figure 5). The overriding policy goal of the stimulus meant that bank loans to these platforms were implicitly tolerated. By the end of 2010, there were 6,576 of

these platforms, a majority of which operated at the county level, and their debt balances accounted for 46.4% of local government debt (NAO, 2011). Their connection to the banking system meant that local government debt became a source of risk for bank balance sheets. Bank finance is the main source of debt funding for local government, accounting for some 78% of loans in 2012 (NAO, 2013). Some local governments have also turned to more expensive trust loans, while trusts have also invested capital in financing platforms.

Figure 5: Typical Structure of a Local Government Funding Platform



Source: Compiled by authors based on IMF (2013: 4).

3.2 The Emergence and Growth of Shadow Banking

While the 2008–09 fiscal stimulus brought to the fore the stability issues surrounding off-balance sheet financing, trust and investment companies first played a role in responding to the pressing need to finance local development in the early 1980s. In 1986, state banks were required to shift their trust business to separate companies, which were thereafter subject to stricter regulations (Lardy, 1998: 73). However their asset base continued to expand rapidly until the mid-1990s, before the PBC started to exercise closer control over their operations. The unprecedented decision of the PBC in 1994 to restrict lending to the MoF for the budget deficit was also a factor in driving the increase in the proportion of off-balance sheet finance (Lardy, 1998). In this way shadow banking emerged in the PRC to capture the off-balance sheet business of formal banks. The term came to represent a pejorative term for all non-bank financial intermediation after 2008, thus obscuring the true nature of risk and usefulness as a source of non-bank funding for small firms (Tsai, 2016).

The PBC's acknowledgement that state-owned banks had participated in creating large amounts of off-balance sheet liquidity drew increasing attention to the visibility of risk on their balance sheets (PBC, 2011). The PBC sought to deal with this by adjusting the reserve requirement ratios of banks so that their capital ratios would more adequately reflect the level of off balance sheet lending. It led the PBC to adopting a wider monetary aggregate – namely total social financing (Table 3). This reflected the fact that between 2002 and 2010, the average annual growth of the all system aggregate was 27.8%, while the average annual growth of bank loans was 18.4% (PBC, 2011).

Table 3: The Components of Total Social Financing

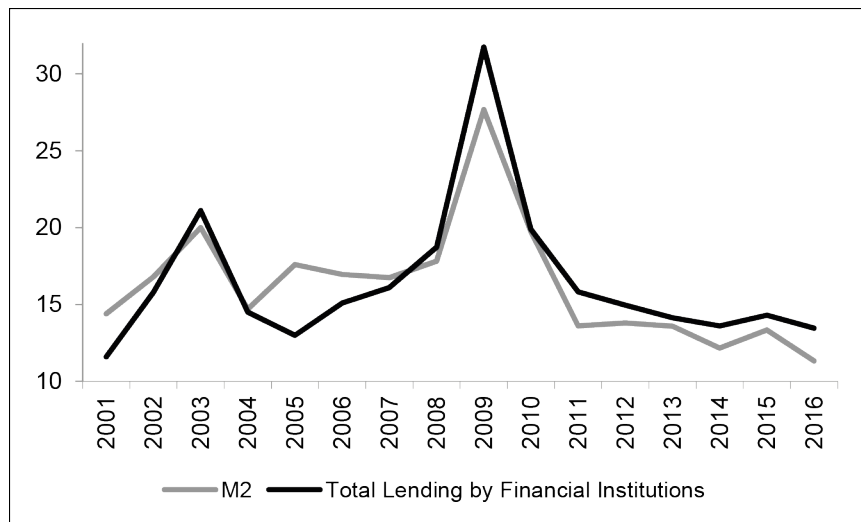
On Balance Sheet	Off Balance Sheet
Renminbi loans by financial institutions	Entrusted loans (in which the bank acts as a loan intermediary)
Foreign currency denominated loans	Trust loans (involving the repackaging and sale of loans as wealth management products)
Stock markets and net financing of corporate bonds	Undiscounted bankers' acceptances (a form of off-balance sheet bank draft guaranteed by the bank)
Others: e.g., micro financing	

Source: Compiled by authors.

The growth in off-balance sheet lending coincided with a reduction in the role of FDI in capital formation. This fell from a pre-financial crisis of 6.8% for the years 2005–07 to 3.0% for the years 2011–2016 (UNCTAD, 2017). PRC banks had long benefited from a surplus of deposits over loans as the PBC purchased foreign exchange from banks (Sun, 2015). The declining role of FDI has placed pressure on domestic sources of bank funding forcing banks to turn to off-balance sheet wealth management products (WMPs) to fund their activities. WMPs are financial products that offer higher returns than conventional equity or deposit accounts. Large SOCBs can purchase WMPs from smaller banks in return for funding. SOCBs can also issue their own WMPs to fund inter-bank lending to smaller banks. While most do not carry an explicit guarantee, their systematic importance in the financial system has earned them a level of public confidence. This is illustrated in data from the BIS, which indicated that approximately 40% of WMP asset portfolios were invested in bond markets with a further 16% invested in money market instruments (BIS, 2017: 13). This has led to concern regarding the emerging inter linkages between the different components of the financial system. In addition, here are numerous opportunities to hide off-balance sheet assets in the calculation of risk-weighted capital, making meaningful cross-county comparison of acceptable levels of off-balance sheet risk extremely difficult (IMF, 2011).

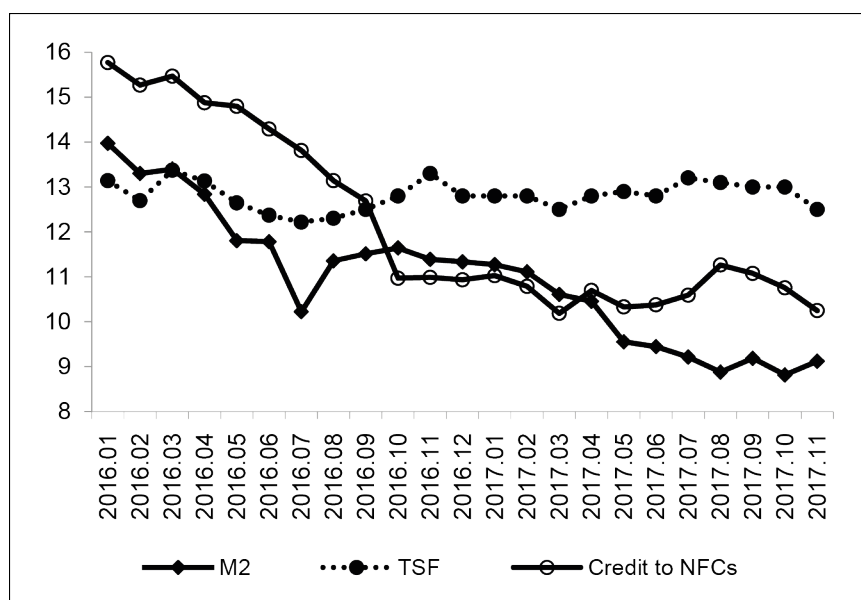
A second consequence of the growth in shadow banking has been the emergence of a discrepancy between bank lending and liquidity growth. From 2008 onwards, bank lending started to outpace the growth in the broad money supply (Figure 6). In 2011, the PBC acknowledged that bank lending was no longer particularly useful in explaining the growth in M2 and that “all system” or total social financing now played a more important role in supporting economic growth (PBC, MPR, Q1 2011). A further change in this relationship occurred in 2016 and 2017 as the growth in the broad money supply and lending to non-financial began to slow in response to government policy, while total social financing continued to expand faster (Figure 7). This indicated the continuing channeling of funds off-balance sheet into poorly performing state enterprises and funding platforms.

Figure 6: Growth in Broad Money Supply vs Bank Credit (%)



Source: Compiled by authors using the PBC's Monetary Statistics.

Figure 7: Year on Year Growth (%) in Credit to non-financial Corporations (NFCs), Total Social Financing (TSF) and M2



Source: Compiled by authors using the PBC's Monetary Statistics.

3.3 Interest Rate Reforms, Deposit Insurance and the Moral Hazard Problem

The removal of the lending interest rate cap in July 2013 therefore represented a new chapter in the PRC's financial reforms. It also necessitated a more complex monetary framework. In 2013 the PBC introduced a Standing Lending Facility to meet large scale demand for long term liquidity and Short-Term Liquidity Operations to facilitate repurchase operations with shorter term maturities (Sun, 2015). The reforms, which began with a widening of interest rate margins in the 1990s, sought to give banks

greater flexibility in the pricing of risk, but limit competition by retaining control over deposit rates. This involved a progressive widening of bank lending rates (albeit around a narrow range) and the eventual removal of the upper rate in 2004 for all banks (except for rural credit cooperatives). On the deposit side, banks were required to match the official deposit rate until 2004, when the lower limit was removed.

In July 2014 the CBRC relaxed its stance on the components used to calculate banks' loan to deposit ratios, a move that effectively allowed banks to expand liquidity. To protect against competition leading to a greater frequency of bank failures, the next stage, namely the removal of the deposit rate cap, required a system of managed bank resolution and deposit insurance. In May 2015, a scheme was implemented which stipulated depositors could receive up to RMB 500,000 in compensation if a bank were to collapse. Finally, in October 2015 it was announced that the deposit rate cap would be lifted, effectively allowing deposit-taking institutions to compete for deposit funds.

The liberalization of the interest rate and the introduction of a system of deposit insurance offered an appealing solution to the pervasive moral hazard problem caused by state-ownership of the financial system. Moral hazard has long permeated all levels of the PRC's financial system. SOCBs were willing to lend to large state enterprises and local governments on the understanding that were these loans to go bad, they would ultimately be bailed out. The moral hazard issue highlights the danger that the welfare and efficiency-enhancing benefits of interest rate liberalization – namely an extension of credit to private firms and greater financial diversity – may be squandered if deposit insurance is not accompanied by wider financial reforms. The latter point is important as in theory, smaller joint stock commercial and city banks and potential new private banks should be the main beneficiaries of deposit insurance.

3.4 Consolidation and Policy-driven Diversity

A consequence of the moral hazard problem in banking, and one which interest rate reform should in theory address, is the lack of diversity in financial institutions. A lack of diversity carries economic costs. One study found that rural financial services did not satisfy the diverse public demand for more sophisticated banking services with many provinces lacking even basic banking services (PBC, 2010). It further noted that three western provinces had more than 50 counties that were classified as “un-banked”. The Rural Household Survey (2014) found that only 27% of demand for loans from the PRC's rural dwellers is met compared to 40% in urban areas. It also found that approximately 50% of urban demand for loans for homes is met compared to 25% in rural areas. A study by the ADB ranked the PRC 84th among a sample of developing and developed economies and 11th among developing Asian economies in a financial inclusion index using data for the period 2004–12 (Park and Mercado, 2015).

The main source of this problem has been the dominance of the SOCBs. While the large SOCBs tend to be profitable, there appears little correlation between profitability and efficiency and SOCBs tended to operate at decreasing returns to scale (Fezioglu, 2009). A study using data for the period 1997–2008 found tentative evidence to indicate that while the lending practices of large SOCBs did not drive economic growth and may have even “crowded out” manufacturing growth, other banks such as policy banks have played a role in financing infrastructure and public goods provision (Andersson et al., 2016). Jiang et al. (2012) find some evidence to indicate that as a multi-layered banking system emerged in the 2000s, the efficiency of all bank types including the SOCBs appears to have improved.

The PRC's approach to improving financial diversity has focused on using policy directives and mixed ownership, rather than outright privatization. This is consistent with the view that there exist a variety of different owners from state to private (OECD, 2015; World Bank, 2014). It recognizes that large banks are in effect financial oligarchies and the inherent conflicts between shareholders and depositors in non-mutual financial institutions led to a too big to fail problem (Mullineaux, 2013). In certain circumstances depositors might have preference for state over private banks (Adrianova et al., 2008). Indeed most of the controlling shareholders of the joint-equity banks, which have been key to reducing the market share of the SOCBs, are SOEs and local institutions (Jia, 2009).

While interest rate reforms have introduced market incentives for a more diverse financial system, state policy and administrative measures have been more successful in promoting consolidation as a means of reducing the dominance of the large state-owned banks. An example of this was the consolidation of troubled rural credit cooperatives (RCCs). These locally owned financial institutions had a history of poor credit management and governance practices during the 1990s (Huang, 2008).⁷ However they provided a vital source of finance for farmers as larger banks often find it unprofitable to operate below the country level. The consolidation of Shanghai's 232 rural credit cooperatives led to the establishment of one single bank, the Shanghai Cooperative Bank. Since 2011, the PBC has set differentiated favorable reserve requirements for agricultural and rural financial service related lending (Sun, 2015). The restructuring and expansion of rural financial institutions has also continued and by end-2016 the PRC had 1,114 rural commercial banks and 1,443 township banks.

Foreign banks have also played a role in promoting financial diversity in the rural sector, albeit within the constraints of capital controls. Since December 2003, foreign banks have been allowed far greater opportunities to conduct local currency business and the number of cities where foreign banks could handle RMB business was increased from nine to 13. The extension of a pilot scheme in 2006 effectively removed geographical restrictions on the operations of foreign banks in rural areas. Interestingly this has gone hand-in-hand with a decline in the asset share of foreign banks (Table 1), but has seen large international banks such as HSBC implement a multi-level city-district rural level expansion model via its wholly-owned subsidiary HSBC Rural Bank (Tobin, 2012). By 2015, foreign banks had a presence in 69 cities in 27 provinces, with 17% of outlets located in the North East, Middle and West of the PRC (PBC, 2016: 47).

The expansion of foreign banks into less banked areas illustrate both the role of policy directives and the challenges of funding bank expansion at the local level. This is borne out in efforts to promote the entrance of private capital. By the end of 2015, the PRC had launched five private pilot banks, which were mostly located in Eastern Provinces and municipalities such as Zhejiang, Tianjin, Shanghai, Wenzhou and Qianhai. Their location indicates that they are mainly targeted at the PRC's growing private sector. But in this sense, they suffer from similar drawbacks to foreign banks. The latter have tended to cluster around financial centers and cities, particularly Shanghai and the Special Economic Zones, areas already geographically well served by financial institutions (Meng, 2009). The expansion of private banks expansions is also heavy constrained by their reliance on non-deposit funding sources. Their deposits

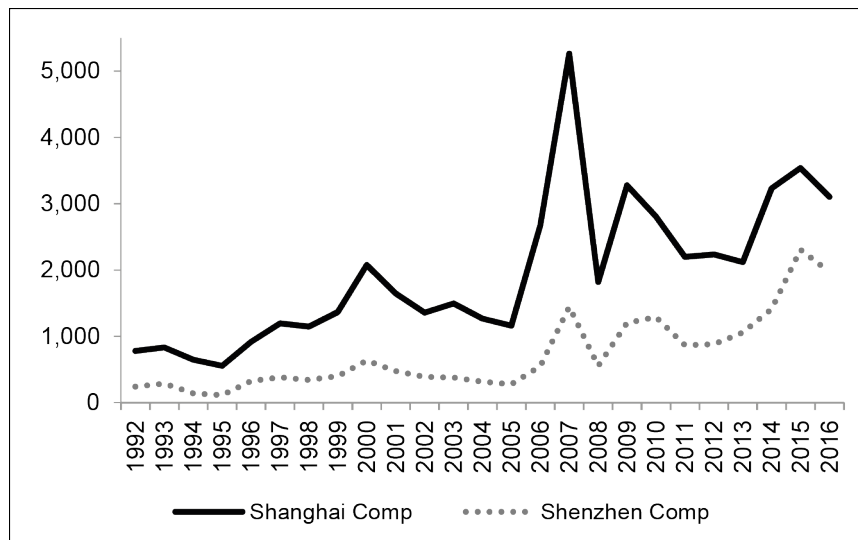
⁷ RCCs were established at the township level from 1951 onwards as part of the rural cooperative movement (Zhao, 2010). By 1955, more than 150,000 had been established. In 1958 RCCs were integrated into the Agricultural Bank of China (which was later integrated into the PBC) before becoming independent institutions again in 1996. For an overview of reforms of RCCs since the mid-1990s see Zhao (2010) and Xie (2003).

represented some 30.6% of their funding, suggesting a heavy reliance on non-deposit-based funding for expansion (PBC, 2016:43). The pilot private banks had a loan book totaling RMB 23.6 billion. This represented just a fraction (0.023%) of total loans

The cumulative effect of these reforms has been a decline in the assets share of large state-owned banks, which fell from 57.9% in 2003 to 39.2% by 2015. This coincided with a fall in the total number of banking entities, which fell from 19,797 in 2006 to 4,261 in 2015 (CBRC, 2015). An unintended effect of consolidation, has been branch-level rationalization and increasing homogeneity, especially in the strategies of the SOCBs. Going forward, the PRC's State Council and the PBC have approved proposals for the adoption of mixed ownership as a way of introducing non-state capital into the financial system and improving ownership diversity. An increasing number of small and medium sized banks have listed on Hong Kong, China's stock exchange as a means of funding their expansion. In 2015, the Postal and Savings Banks has also introduced international strategic investors, including large international banks, domestic insurance companies and SWFs in a manner not unlike the initial approach to the reform of the large SOCBs in the 2000s.

4. STOCK MARKETS AND FINANCIAL CENTERS

The emergence of Shanghai and Shenzhen as the PRC's main on-shore financial centers can be traced to the establishment in 1990 of stock exchanges in both cities. Both municipal governments, who oversaw the development of stock markets until the late 1990s, followed policies based on *equity developmentalism* (Green, 2004). This involved the use of a range of policy tools to boost trading volumes, attract new listings and increase the number of exchange members. The result was a rapid growth in market capitalization and listed companies (Figure 8 and Table 4). While Shanghai has benefited from being the location of choice for foreign banks and the listing destination for large SOEs, Shenzhen's competitive advantage has tended to come from its tax and cost competitiveness. This has made it more attractive for small and medium enterprises and venture capital. Recently both cities have benefited from national level policies promoting pilot Free Trade Zones (FTZs) and Stock Connect schemes. The former were designed to allow controlled off-shore currency trading for PRC banks and foreign financial institutions. Shanghai's FTZ was launched in 2013. The Stock Connect schemes allowed approved overseas investors purchase domestic shares via Hong Kong, China's off-shore financial market. Shanghai was the first to benefit from this in 2014 and the scheme was extended to Shenzhen in 2016. The developments have seen Shanghai and Shenzhen emerge as the world's 6th and 20th largest financial centers respectively by 2017 (Yeandle, 2017).

Figure 8: Shanghai and Shenzhen Composite Indices Annual Closing Level 1992–2016

Source: Compiled by authors with data from PBC Financial Stability Reports, various years.

Table 4: Selected Measures of the Role of the People's Republic of China's Stock Markets (1990–2015)

Year	Number of Listed Companies	Market Capitalization (billion RMB)	Ratio of Stock Financing to Loans	Market Capitalization to GDP (%)	Traded Market Capitalization to GDP (%)
1990	10	—	—	—	—
1992	53	104.8	—	3.9	—
1993	183	353.1	4.96	10.2	2.5
1995	323	347.4	1.27	5.9	1.6
2000	1,088	4,809.1	11.5	48.0	16.2
2005	1,381	3,243.0	2.05	18.0	5.8
2010	2,063	26,542.2	11.3	67.0	48.5
2014	2,613	37,254.6	4.76	59.0	49.6
2015	2,827	53,130.4	7.09	78.5	61.8
2016	3,052	50,824.5	15.3	68.3	52.8

Source: Compiled by the authors with data from the People's Bank of China and China Securities and Regulatory Commission.

Rapid development has also left unresolved challenges. There remains a very high level of liquidity within PRC society and by the end of 2015 over RMB 1,841 billion of this was on deposit at banking institutions. Both the traded capitalization and ratio of stock finance to loans remains low (Table 4). The absence of alternative forms of quality investment especially during the 1990s (land and property in particular) added novelty value to share ownership but did not necessarily increase the choice of investments available to investors. The majority of the 3,052 companies listed at the end of 2016 were SOEs (Table 4). Trading patterns remain highly erratic. The average turnover ratio of shares on the Shanghai stock market was some 388% in 2015, while the market had a price earnings ratio of 17.6%. High turnover levels and comparatively

high valuations implies that the increase in market activity has been driven by a small but relatively affluent group of individual shareholders who own comparatively small portions of total equity. By 2015 the number of accounts had grown to over 214 million, but the ratio of new to existing accounts remains volatile. The data show that in 2008, as the market indices collapsed, some 34 million accounts were closed (Table 5). Many accounts are thought to be inactive or duplicate.⁸ The diffused nature of shareholders mitigates the possibility of a credible takeover threat.

Table 5: Selected Indicators of Share Ownership

Year	Ratio Tradable to Total Shares	Average Turnover Ratio Shanghai Market	Total Share Accounts (‘000s)	New Share Accounts (‘000s)	Ratio of New Share Accounts to Total Accounts
1993	27.8	—	7,776.7	561.0	72.1
1995	35.5	528.7	12,424.7	183.5	14.8
2000	35.7	492.9	58,011.3	1319.2	22.7
2003	35.4	250.7	69,926.6	142.3	2.0
2005	32.8	274.4	73,360.7	1,203.3	1.6
2008	37.2	392.5	104,490.9	−34,379.3	−32.9
2009	62.0	499.4	120,376.9	15,886.0	13.2
2010	72.7	197.6	133,910.4	13,533.5	10.1
2015	78.6	388.5	214,775.7	72,628.9	33.8

Source: Compiled by the authors with data from the China Securities and Regulatory Commission.

The potential of both Shanghai and Shenzhen to offer a more sophisticated range of financial products is also hindered by a lack of a fully convertible renminbi (RMB) and capital controls (cf. Section 7). Notwithstanding these drawbacks, there are some salient aspects of the PRC’s shareholding reforms. As will be discussed below, concessions on overseas access and foreign share ownership have seen domestic PRC shares added to the Morgan Stanley Emerging Markets Index (MSCI) while the split share reform has provided a politically acceptable way of reducing the proportion of non-traded shares. In the absence of full capital account liberalization, Hong Kong, China and other off-shore renminbi settlement hubs have provided a safe channel to facilitate the entrance of foreign via quota-based allocations. In this sense, controlled internationalization has often provided a vital means of overcoming bottlenecks to the development of the domestic market.

4.1 A Politicized Regulatory Framework

Informal SOE share issues and (authorised) over-the-counter (OTC) trading started in the PRC in the mid-1980s. When the Shanghai and Shenzhen stock markets started operations in December 1990 they were initially without central government supervision. One implicit intention in establishing the formal stock exchanges was to legitimate the flourishing stock trades in informal kerb markets (Liu and Green, 2003). The CSRC was not established until October 1992. Its establishment was mainly in response to scandals and riots triggered by stock market irregularities. Initially, the

⁸ Officials estimate that the real number of investors is around half the official number with investors using multiple accounts to for illegal share deals. See The Economist (2003) and FT (2003).

CSRC had little authority and it faced criticism from other bodies such as the National People's Congress which in 2002 accused the CSRC of being responsible for presiding over the listing of unqualified companies, the falsification of financial statements, and insider trading (FT, 2002). Attempts by the CSRC to de-list companies were subject to political intervention and a lack of transparency.⁹ This remained the case until 1999, when the first reasonably comprehensive Chinese Securities Law became effective.

The number of listed companies is controlled by the regulator. In practice this favors large SOEs. Indeed listed SOEs differ from the conventional understanding of a state enterprise in that they have undergone partial privatization through the policy of *share issue privatization* or the *share ownership scheme*. Privatization was partial, with the state being the single largest block holder in most listed state enterprises. The proportion owned by the state tends not to be freely traded and explains the difference between the ratio of market capitalization (which includes traded and non-traded shares) to GDP and the ratio for traded shares. Shares of listed SOEs were divided into three categories, usually about one-third each. These were tradable shares which were sold to the public; legal person shares – typically held by a state-owned parent company and in principle non-tradable; and non-tradeable shares held by the state. Tradeable shares were further divided into A-shares which were traded in domestic currency and B-shares designed for foreign investors and traded in foreign currency (US dollars in Shanghai). The separation from the more liquid domestic market meant that B-shares tended to have lower valuations and small trading volumes. In 2001, the B-share market was opened to domestic investors. However, this failed to stimulate interest in the market and by 2016 there were just 100 listed B-shares.

The politicized regulatory framework also had an important effect on investor sentiment. Investors perceived that once a listed firm got into financial difficulties, it would receive government support. This is illustrated most forcefully in the case of the soaring share prices of firms put into “special treatment” category or “special transfer” categories. After 1998, firms with two years of continuous losses or other problems were placed in the “special treatment” category and were subject to five percent limits on their daily share price movements. After July 1999, firms with three years of continuous losses were put into “special transfer” category. In 2000, five of the companies with the worst balance sheets for 1999 were among the top 10 performing B-shares (SCMP, 2001).

4.2 From “One-third Privatization” to the “Split Share Reform”

At the outset of the PRC's stock market development, at least two-thirds of the capital of most of the PRC's listed firms were not freely floated on the stock market. Table 5 shows that the ratio of non-tradable to tradable shares remained just above 30% until 2008. This effectively meant “one-third” privatization and no meaningful change in ownership. One-third privatization meant that one of the main benefits of privatization for state-enterprises (i.e., the achievement of a hard budget constraint) was not realized (Sun, 2003). In the absence of a hard budget constraint and with few checks on their behavior, some SOE managers were able to privatize enterprise assets, leaving the original state company as holder of liabilities. Subsequently, the SOE declared bankruptcy, defaulting on existing financial obligations in what Lardy (1998) termed *false bankruptcy*.

⁹ The CSRC was criticised for not de-listing Zhengzhou Baiwen when the local government threw its political weight behind the firm to keep it afloat (SCMP, 2001).

Efforts to reform the overhang of non-tradable shares were often frustrated by market volatility as individual investors feared that the market would be flooded with low quality A-shares. For example a failed effort to float non-tradable A-shares in 2001 led to a significant collapse in the Shanghai and Shenzhen composite indices (Figure 8). The 2001 collapse provided the impetus for a more focused approach to resolving the overhang of non-traded shares by increasing the participation of foreign investors and adopting a more gradual approach to the pricing of non-traded shares. Beginning in 2002, foreign investors – who are licensed by the CSRC – were permitted to purchase and sell tradable A-shares through the Qualified Foreign Institutional Investor (QFII) scheme and non-tradable share via a series of reforms to the Mergers and Acquisitions rules during 2002–2004 (Lee, 2008). The effect of these reforms was that by the time the split share reform was launched on a trial basis in September 2005, foreign investors had two tracks through which they could purchase domestic shares. The split share reform ameliorated many of the agency costs of small information and control disadvantaged tradable shareholders that plagued earlier reform efforts, by allowing for negotiation between tradable and non-tradable shareholders to determine the appropriate compensation level (Yeh et al., 2009). Its overall effect was a rapid change from one-third to two-third privatization and by 2015 the ratio of tradable to non-tradable shares stood at 78%.

Although the split share reform has been successful in resolving the overhang of non-tradeable shares overseas holdings of PRC equity remain low, accounting for around 1.3% of total market capitalization at end of 2016. The absence of a feasible way of allowing foreign participation in domestic markets also represented a significant obstacle to efforts to have the PRC's tradable A-shares included in the Morgan Stanley Emerging Markets Index (MSCI). The index is used by most large money managers and funds and inclusion has the potential to increase the demand for A-shares as well as providing a significant vote of confidence in the PRC's equity markets. MSCI inclusion requires exchanges to reach certain thresholds of accessibility, transparency and liquidity. In June 2017, it was announced that 222 eligible A-share stocks (a weighting of around 0.7% of the MSCI index in 2018) would be admitted to MSCI index beginning in May 2018, with access provided through the Hong Kong, China based Stock Connect scheme (SCMP, 2017b). Although this represented a scaling back of a 2016 plan to include some 448 qualifying stocks, the decision opens the possibility of an increased weighting subject to future market reforms.

4.3 Hong Kong, China's Role

Hong Kong, China's "off-shore" money market has long represented the PRC's financial interface with the rest of the world (Tobin, 2011). Listing on Hong Kong, China provided enterprises with a means of raising funds and bonding themselves to higher corporate governance standards (Sun and Tobin, 2009). The attractiveness of this approach is illustrated in the fact that between 1993 and 2017, some 229 PRC enterprises listed H-shares on Hong Kong, China's stock exchange. Other state enterprises incorporated subsidiaries in Hong Kong, China and were listed as "red chips". The first PRC SOEs to list in Hong Kong, China in 1993 were mostly industrial enterprises did so at a time when PRC markets were in their infancy. In the 2000s all of the PRC's big four state-owned banks were listed in Hong Kong, China. More recently Hong Kong, China's stock exchange has been used by smaller provincial level banks such as Harbin Bank, Bank of Zhengzhou and the Bank of Tianjin. This has offered smaller banks a useful way of mitigating domestic funding constraints as well as attracting international shareholders.

More recently Hong Kong, China's roles has evolved as described previously to allow foreign investors a route into the A-share market (the north bound route) and domestic PRC investors an option to invest in Hong Kong, China shares (the south bound route) via the stock connect scheme. Both routes are subject to daily quotas and restrictions on beneficial ownership. Hong Kong, China has also offered a useful platform to expand on the qualified investors scheme. In December 2011, a pilot programme was launched to allow fund management companies approved as RMB Qualified Foreign Institutional Investors (RQFII) to use their RMB funds raised in Hong Kong, China to invest in domestic securities markets. This mitigates against the prospect of capital outflows. In 2013 the scheme was extended to London. While the initial QFII scheme was viewed as a watershed reform in the opening of the PRC's securities markets to foreign investors, its extension to include RMB raised in Hong Kong, China and other off shore currency markets is indicative of the cautious quota-based approach to allowing foreign capital into the PRC's financial centres and the dilemma faced by the PRC in implementing capital account reforms.

5. BOND MARKETS

Domestic PRC government and corporate bonds are traded on the country's two stock exchanges (mainly Shanghai), OTC and, most importantly, in the inter-bank bond market. The exchange-based market is an order-driven market. Its participants include securities companies, insurance companies, securities investment funds, trust and investment companies, credit cooperatives, other non-financial institutional investors, and individual investors. As mentioned above, bonds have also become a major component of WMPs. Banks often use securities companies to manage the proceeds of WMPs, while securities companies themselves often use repo agreements to sustain bond prices (BIS, 2017). Capital account controls and a limited pool of off-shore RMB liquidity have meant relatively few international issues of PRC government bonds. Their relative scarcity has meant that such bonds tend to be highly sought after. Nevertheless, liquid markets for government debt are a prerequisite for foreign residents to hold part of a government debt and exercise their judgement on the solvency of the country concerned (Noyer, 2015). As the following section shows, a combination of domestic market opening and capital account controls have created a trade-off between the on-shore and off-shore markets.

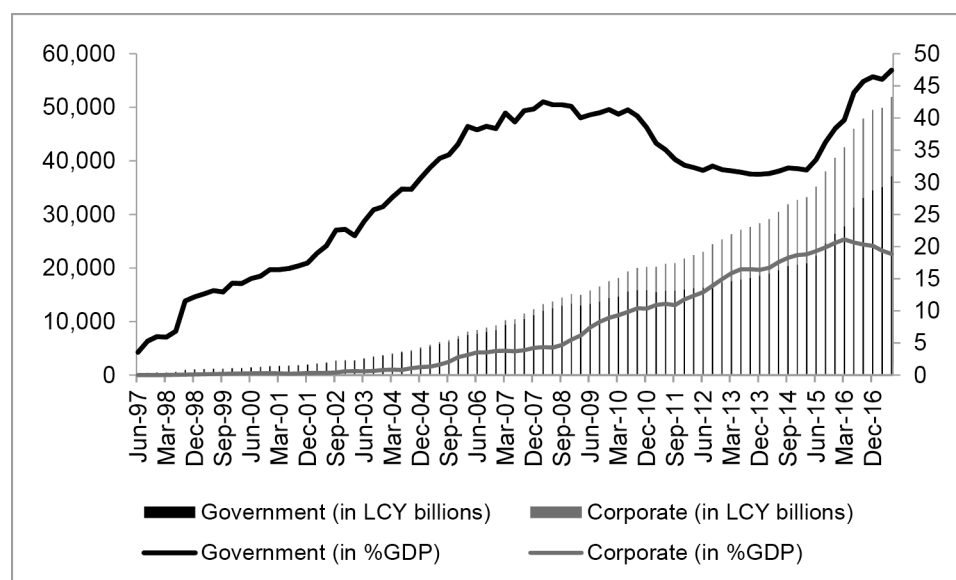
Much of the early growth of the PRC's bond markets was motivated by the demands that financing economic growth placed on central and local government. During the 1980s, government bonds, issued by the MoF, were placed as a form of taxation, and were not tradable. Using bonds as a form of finance also brought with it some problems, especially the growth of unregulated issues. While the government made good on many of them, it also clamped down severely on new non-MoF bond issues. A case in point and one that had important implications for international investors emerged following the default by Guangdong International Trust & Investment Corp (GITIC) in 1998 on interest payments on a bond. GITIC also offered a first insight into how difficult it had become for Beijing both to finance local investment and retain oversight and control over financial institutions at the local level (Tobin, 2011).

The international trust and investment corporations which were established at local level during the 1980s to help accelerate local government development benefited from special exemptions from central government control. Their difficulties raised immediate question over whether the PRC government would stand behind the huge debts of the PRC's regional investment companies. Subsequently the PRC government introduced greater regulatory controls designed to ensure that corporations issuing bonds in the

future would be able to cover due interest payments. Bond issues by the MoF climbed steeply after 1997 as part of a fiscal stimulus plan designed to prevent sharp economic contraction in an environment characterized by long-lasting deflation (1996–2003). This feature was again apparent following the 2008–09 fiscal stimulus, with local governments making use of funding platforms to issue debt (see above). What stood out about these funding platforms was that they were effectively bonds in all but name in the sense that they were set up to finance specific projects, mostly infrastructure related. Repayment generally comes from project revenue streams, bank loans or local government land sales and subsidies.

The PRC's corporate bond market remains largely restricted to state corporations. Corporate bond issues fell sharply in the early 1990s, but have started to rise again in recent years. For much of the 2000s the market was heavily dominated by government securities. Since 2015 the paying down of foreign currency loans has witnessed the increasing issue of domestic bonds as corporations restructure their debts. The scope for corporate bonds has expanded since 2005 when firms were allowed issue short term commercial paper for the first time (Naughton, 2007). By 2014 short term financing bills accounted for 4.1% of bond issues (PBC, 2015). As of June 2017, the government bond market had reached a total volume of RMB 37,159 billion or 47% of GDP, while the corporate bond market stood at RMB 14,771 billion or 19% of GDP (Figure 9).

Figure 9: Development of the People's Republic of China's Local Currency Bond Market in Billion RMB (Left Axis) and as Share of GDP (Right Axis)



Source: Compiled by authors with data from AsianBondsOnline.

Going forward, some form of municipal bond market would appear most consistent with the state's reform agenda. This would offer the opportunity to break the dominant role of loan financing from state-owned banks in local government finance. That said, a functioning municipal bond market seems some distance off. Most municipal governments lack the type of fiscal transparency and regulations required to sustain market development. In this sense bonds were always going to work better for more affluent provinces with stronger fiscal positions. In 2014, Guangdong and Shandong became the first provinces in the PRC to issue municipal-style bonds, as part of reforms intended to tackle rapid growth in local government debts. While these reforms

represent a positive step forward in local government financing, they favor revenue rich coastal provinces.

Less clear is the future direction of off-shore bond issues. The off-shore market has long had a far smaller pool of liquidity to draw on than the on-shore market. RMB denominated (Dim Sum) bonds issued in Hong Kong, China provided a short term solution to this. A RMB devaluation and a decline in off-shore renminbi deposits served to highlight the limited settlement options and RMB liquidity of the off-shore market. Capital controls made it difficult for domestic PRC issuers to repay off-shore bonds. Consequently, RMB Dim Sum bond issues in Hong Kong, China fell from RMB 300 billion in 2014 to RMB 130 in 2016 (SCMP, 2017c). A liberalization of access restrictions for foreign financial institutions in 2016 made it easier for them to participate in the on-shore market. That said, just as in the case of equities, international investors accounted for only 1.2% of the onshore bond market at the end of 2016 (SCMP, 2017c). 2016 also saw the first offshore renminbi sovereign bond issued by the MoF outside of the PRC on the London Stock Exchange. Other countries such as Poland have issued so called Panda Bonds which are denominated in RMB. Tight control over settlement, normally conducted through overseas PRC state-owned banks, indicates that the market for these bonds remain short of a fully liquid market for government debt.

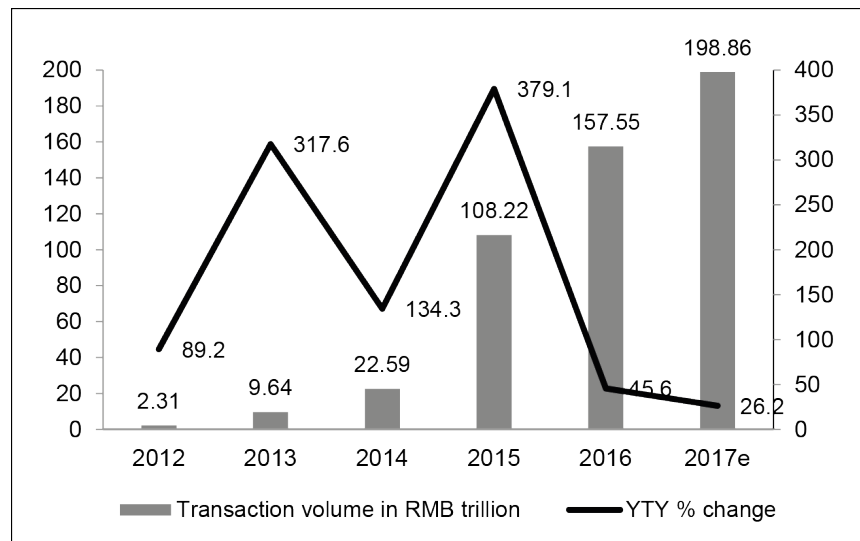
6. FINTECH

The PRC's financial-technology (or fintech) industry – i.e., the application of internet-based technology within the financial services industry – has been flourishing. As of January 2018, eight of the 28 global fintech companies with a valuation exceeding US\$ 1 billion are from the PRC, and nine when including Hong Kong, China (TechCrunch, 2018). The rise of fintech in the PRC has benefited from an underdeveloped banking sector which, as discussed, has failed on delivering financial inclusion and therefore provided an opportunity for fintech companies. It also benefited from an initial light-touch approach regarding regulation and a technophile population with 772 million internet users, 98% of which use mobile devices (CNNIC, 2018). Arguably, PRC fintech companies have also benefitted from effective protection that limits the scope of foreign tech companies to operate in the PRC.

Fintech in the PRC comprises seven areas: payments and e-wallets; supply chain and consumer finance; peer-to-peer (P2P) lending platforms; online funds; online insurance; personal finance management; and online brokerage (Mittal and Lloyd, 2016). The PRC is world-leading in many of these areas. Notably, it has developed the world's biggest markets for digital payment and online lending (The Economist, 2017).

Mobile payments have grown rapidly in the PRC (Figure 10). In 2016, PRC consumers spent RMB 157.55 trillion (US\$ 22.8 trillion) via mobile payment platforms, compared to only US\$ 112 billion in the United States (Wang and Dollar, 2018). Estimates suggest that mobile payment transaction reached almost RMB 200 trillion in 2017. In 2016, over 90% of mobile payments were made with apps developed by Alibaba's Alipay (54%) and Tencent's TenPay (37%), the PRC's two leading fintech firms (Wang and Dollar, 2018).

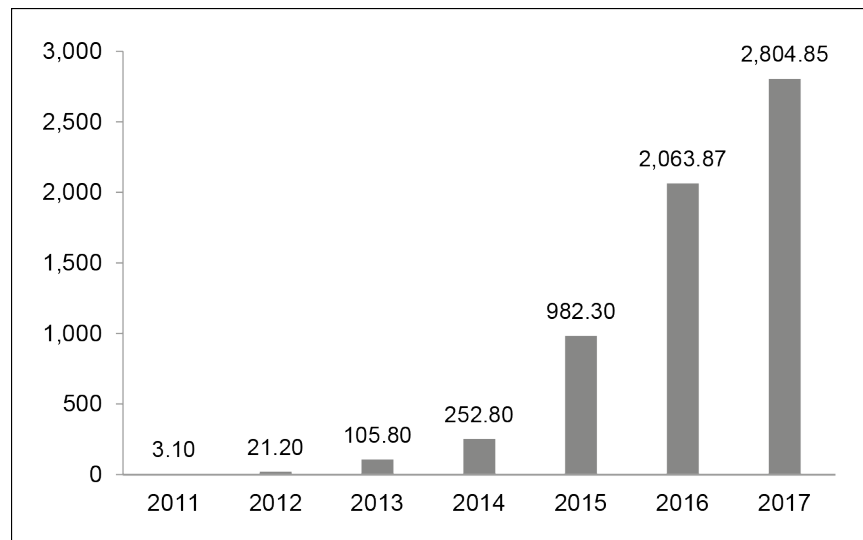
Figure 10: Transaction Volume in the People's Republic of China's Mobile Payments Business (RMB trillion) and Year-to-year Percentage Change (Right Axis)



Source: Wang and Dollar (2018), based on data from the PBOC.

Online lending in the PRC is dominated by peer-to-peer (P2P) lending, which has been developing in the PRC since around 2010. In 2017, the transaction volume of P2P lending reached RMB 2.8 trillion (Figure 11). P2P online platforms connect borrowers directly with lenders (or investors), who can get higher returns than the interest rates they get with conventional banks. The number of P2P lending platforms increased rapidly from about 200 in 2012 to a peak of almost 3,500 in November 2015. Given P2P lending operated in a regulatory vacuum until 2016, it is not surprising that the market included a large number of rogue schemes. By the end of 2015, more than a third of all P2P platforms were considered “problem platforms” that had either stopped repayments, were investigated by the police, or whose operators had disappeared with lenders’ money (Chorzempa, 2016). The most prominent P2P Ponzi scheme was the supposed P2P platform Ezubao, which attracted US\$ 7.6 billion from nearly one million lenders in only 18 months, before it was found out that 95% of its borrowers were fake (Wang and Dollar, 2018). In April 2016, a “rectification campaign” was launched to “probe legal compliance and limit risks in Internet finance”, followed by the introduction of comprehensive CBRC regulation in August 2016 imposing caps on P2P borrowing and prohibiting P2P platforms to act as financial intermediaries (Chorzempa, 2017). The CBRC regulation also caps the size of online loans at RMB 1 million for individuals and RMB 5 million for companies, requires lenders to use a custodian bank, and forbids platforms to guarantee the principal or the interest on loans they facilitate (Wang and Dollar, 2018). Since the introduction of regulation of P2P lending, the number of P2P platforms has fallen significantly, to less than 2,000 by the end of 2017. Despite the market consolidation, the transaction volume has continued to increase at a rapid pace, to RMB 2,805 billion (US\$ 442 billion) at the end of 2017. The PRC therefore accounts for about three-quarters of global online lending (PWC, 2017b).

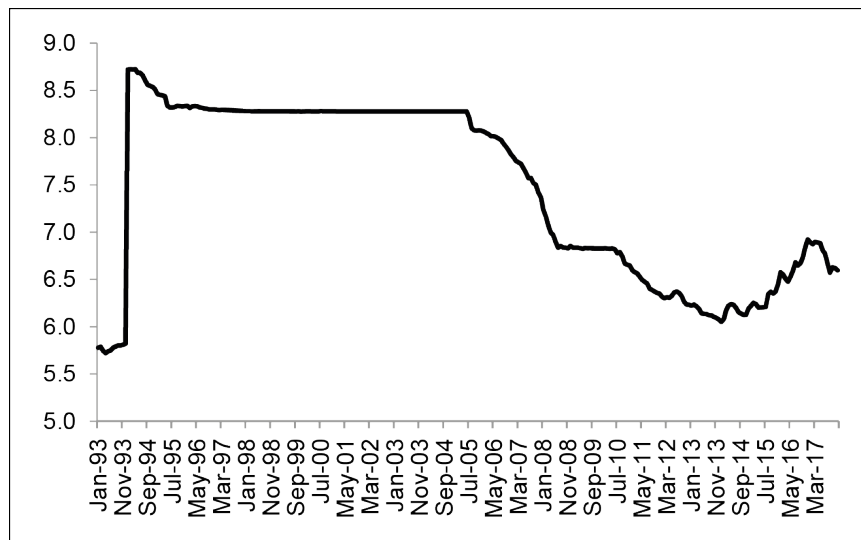
**Figure 11: Transaction Volume of P2P Online Lending Platforms
(RMB billion)**



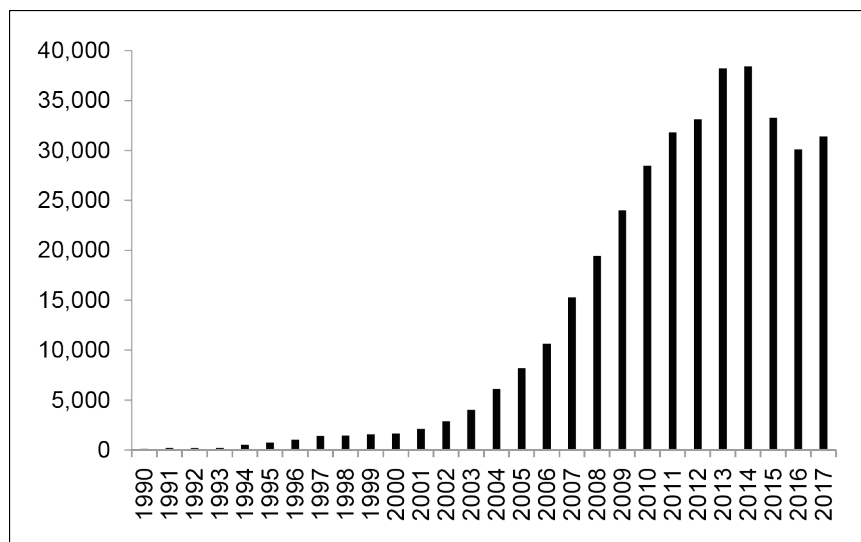
Source: Wang and Dollar (2018), based on data from Wang Dai Zhi Jia.

7. EXCHANGE RATE MANAGEMENT AND FINANCIAL OPENING

The RMB exchange rate has been tightly managed by the People's Bank of China (Figure 12). In January 1994, the PRC unified its dual exchange rates, devalued the RMB by 33% overnight and pegged it to the US dollar at 8.7. From August 1994 onwards, the RMB gradually appreciated against the dollar until May 1995. It was then kept firmly at 8.3 RMB/US\$ until July 2005, when the PBC allowed for a modest appreciation against the dollar of 2.1% and announced that it would adopt “a managed floating exchange rate regime based on market supply and demand with reference to a basket of currencies” (PBC, 2005). The RMB was subsequently allowed to strengthen, not least in response to massive pressure from the US and other major trading partners who complained about “currency manipulation”. In July 2008, in the face of the Global Financial Crisis, the PBC effectively reinstalled the dollar peg, this time at 6.8 RMB/US\$. In June 2010, the peg was abandoned and the PRC returned to a strategy of increasing currency flexibility, with a gradual widening of daily trading bands. The RMB continued to strengthen up to a high of 6.1 RMB/US\$ in January 2014. Net capital outflows since mid-2014 caused the RMB to depreciate up till the end of 2016. Various reasons were behind this, including the slowdown of the PRC economy and doubts about the country's future growth prospects; a growing importance of outward direct investments by PRC firms; PRC firms' repayments of their dollar debt; but also capital flight. The PBC responded by tightening capital controls and by heavily intervening in the foreign exchange market to strengthen the RMB. As a result, the PRC's foreign exchange reserves declined by nearly a trillion US\$ from a peak of US\$ 3.99 trillion in June 2014 to US\$ 2.998 trillion in January 2017. The PRC's foreign exchange reserves had built up rapidly since the early 2000s (Figure 13) on the back of large and growing capital account surpluses and recurrent foreign exchange intervention aimed at keeping the RMB competitive.

Figure 12: RMB/US\$ Exchange Rate, January 1993–December 2017

Source: Compiled by the authors with data from the Pacific Economic Exchange Rate Service.

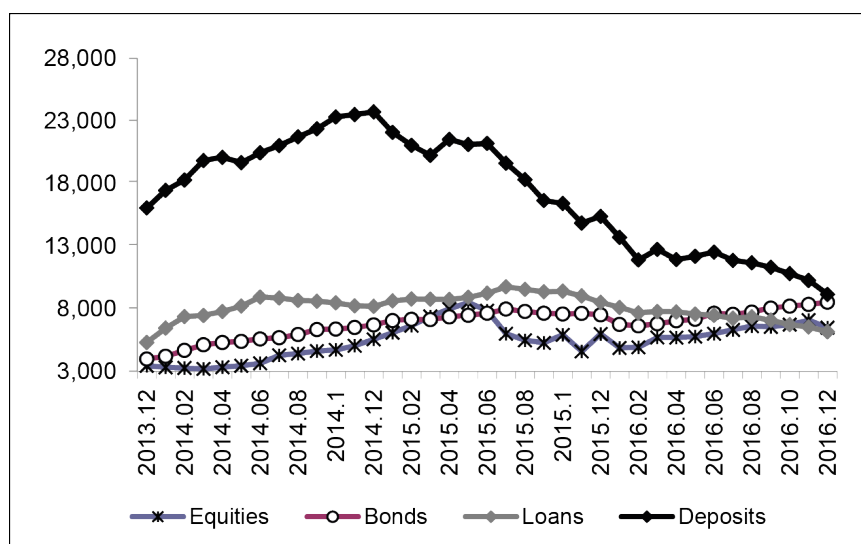
Figure 13: The People's Republic of China's Foreign Exchange Reserves (in US\$ 100 million), 1990–2017

Source: Compiled by the authors with data from the State Administration of Foreign Exchange.

Throughout, PRC authorities have maintained tight capital controls, which enabled the PBC to manage the exchange rate while at the same time allowing a reasonable degree of monetary policy independence (Reade and Volz, 2012). Capital controls have also permitted the government to keep a tight grip on the financial sector. The PRC has taken cautious steps in liberalizing cross-border financial flows since the early 2000s. As discussed, since 2002, foreign investors have been allowed to buy and sell RMB denominated shares in the PRC's mainland stock exchanges through the QFII scheme. Commercial credits inflow and outflow restrictions were lifted in 2013. However, cross-border investment by individuals remain tightly controlled.

The slow pace of domestic financial reform and the continued presence of widespread capital controls have been an impediment to the internationalization of the RMB, a goal that the PRC has pursued since 2009 (Volz, 2014). Figure 14 shows that while foreign holdings of domestic financial assets such as equities, bonds and loans have remained low for the reasons described earlier, the PRC did succeed in creating a large pool of off-shore RMB. Currency devaluation and capital controls have seen a substantial reduction in this since 2014. As the previous sections indicated this reduction may have a knock-on effect on the prospects for increasing the overseas holdings of equities and bonds.

Figure 14: Domestic Renminbi Financial Assets Held by Overseas Entities, 2013–16 (100 million Yuan)



Source: Peoples Bank of China, Monetary Statistics.

8. CONCLUSIONS

The PRC has come a long way in developing its financial system, and it has done so at a speed that has been breathtaking. the PRC's "big four" banks (ICBC, CCB, ABC, BOC) are now the four largest banks in the world by assets, while another 14 PRC banks make it into the top 100 largest banks (Mehmood, 2017). Her bond market is the third largest after the US and Japan. The PRC has also become the world's leading nation in the area of fintech, with the biggest market for digital payment and online lending. Moreover, the PRC's efforts to promote the RMB as an international currency have already resulted in the inclusion of the RMB in the International Monetary Fund's Special Drawing Rights basket, where it joined the dollar, the euro, the Japanese yen and the British pound in 2016. While this reflects the incredible growth and development success the PRC has achieved over the last four decades, caution is warranted. Indeed, the rise of the PRC's banks is somewhat reminiscent of the rise of Japanese banking institutions, which in 1989 entirely occupied the list of the 10 largest banks in the world (Chicago Tribune, 1989). For Japan, the rapid expansion and internationalization of its financial system proved a challenging and costly experience. The current PRC leadership has started to deal with these challenges. While it remains committed to the goal of establishing Shanghai as a global financial center and develop the RMB into a truly global currency, it has become increasingly conscious of the dilemmas posed by an open capital account. Indeed, efforts to

internationalize the RMB have been slowed down recently with the reinforcement of stricter capital controls.

While this account has illustrated that the development of the PRC's financial system has tended to mirror closely developments in the international system, the PRC now faces major challenges in terms of financial stability emanating from its enormous level of debt and the enormous size of its shadow financial system (e.g., Song and Xiong, 2018). An optimal scenario for PRC policymakers is a managed unwinding of counterparty obligations involving the restructuring and diversification of corporate debt alongside the creation of a more diverse financial system. Thus far, policy has focused on debt-for-equity swaps with indebted state enterprises. Debt-for-equity swaps imply that state banks will in the absence of broader financial market reform carry the risk of these restructurings on their balance sheets. This is likely to further constrain their ability to allocate credit to productive uses in the corporate sector. Debt-for-equity restructuring also increases the urgency of corporate governance reform in equity markets. Weak governance continues to present a significant limitation on restructuring as banks face significant governance obstacles in monitoring repayment. In the absence of further reform, equity markets themselves also appear poorly placed to absorb significant amounts of debt.

Another major challenge, which has received growing attention of PRC financial authorities, is the alignment of the financial system with sustainable development. While progress has been made since 2012, when the CBRC first issued Green Credit Guidelines “for the purpose of encouraging banking institutions to, by focusing on green credit, actively adjust credit structure, effectively fend off environmental and social risks, better serve the real economy, and boost the transformation of economic growth mode and adjustment of economic structure” (CBRC, 2012), for the time being the vast majority of lending and investment does not sufficiently take into account environmental and climate risk (UNEP Inquiry, 2017; Volz, 2018). These risk are amongst the greatest systemic medium- and long-term challenges facing the PRC economy, and the financial sector ought to play a leading role in mitigating them.

Moreover, the PRC is facing the challenge of aligning the interests of society and the financial sector. The status of the sector more generally has been undermined by malpractices in the lead up to the recent Global Financial Crisis. For the PRC these challenges are arguably intensified by the transition process and the need to accommodate the needs of an increasingly affluent society.

Overall, the PRC has come a long way in developing its financial system, which has played a crucial role in supporting the economy's investment-driven growth model. But some of the very factors that have helped this rapid development are now proving to be a liability for the future.

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